INCIDENCE OF INTERMEDIATE SYNDROME IN PATIENTS ADMITTED IN TVMCH FOLLOWING ORGANOPHOSPHATE POISONING

INTRODUCTION

Organophosphate poisoning remains a major cause for morbidity and mortality in various areas of Tamil Nadu. OPC poisoning can manifest in three different clinical phases namely: Acute cholinergic crisis within few minutes to several hours, Intermediate syndrome and Delayed polyneuropathy 2-3 weeks after acute exposure. First described by Senanayake and Karallede in 1987, intermediate syndrome is characterised by weakness of proximal limb muscles; neck flexors; respiratory muscles; motor cranial nerves. Atypical presentation includes continued or relapse of acute cholinergic crisis. Prompt identification and management could decrease the morbidity and mortality.

AIM OF THE STUDY: To document the clinical profile, the laboratory profile and to study the incidence of intermediate syndrome in patients admitted with organophosphate poisoning in TVMCH from January 2016 to January 2017.

MATERIALS AND METHODOLOGY: 75 randomly selected patients admitted in the Department of Medicine, Tirunelveli medical college hospital from January 2016 to January 2017 were studied. Patients who qualified the inclusion criteria of this study were followed up from admission till the end point

(discharge/death). The type of OPC consumed, their clinical profile and laboratory profile were documented in predesigned data collection forms.

RESULTS: The mortality due to OPC poisoning in this study was 20%. The incidence of intermediate syndrome in this study was 12%. The occurrence of intermediate syndrome was more frequent in Dimethoate compound. The serum cholinesterase level was significantly lower in those patients who required ventilator support. The serum cholinesterase level was significantly lower in the patients who died when compared to those who survived. Hence low serum cholinesterase level was associated with increased mortality.

CONCLUSION: The incidence of intermediate syndrome in this study was 12%, with Dimethoate being the most common OP compound responsible. Intermediate syndrome is an important complication of OPC poisoning and should be treated adequately. Complete recovery from skeletal muscle weakness occurs in IMS, provided ventilatory care is adequate. Therefore the treating physician has to be watchful for the development of intermediate syndrome, as early recognition and management provides good survival benefit.

KEY WORDS: Organophosphate (OPC) poisoning, intermediate syndrome, serum cholinesterase.